

forest model with sociocultural and clinical variables as features to train the models.

**Results** Both classification models performed similarly in identifying suicide attempters and non-attempters. Our regularized logistic regression model demonstrated an accuracy of 66% and an area under the curve (AUC) of 0.71, while the random forest model demonstrated 65% accuracy and an AUC of 0.67.

**Conclusion** Machine learning algorithms offer a relatively successful method for incorporating many clinical features to predict individuals at risk for future suicide attempts. Increased performance of these models using clinically relevant variables offers the potential to facilitate early treatment and intervention to prevent future suicide attempts.

**Disclosure of interest** The authors have not supplied their declaration of competing interest.

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## Oral communications: Genetics & molecular neurobiology; neuroimaging; psychosurgery & stimulation methods (ECT, TMS, VNS, DBS) and others

0076

### A hybrid effectiveness-implementation trial of wellness self-management program for patients with severe mental illness in an Italian day hospital setting

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**Introduction** Wellness self-management is an adaptation and expansion of the illness management and recovery, an internationally recognized best practice. WSM is a recovery-oriented, curriculum-based practice designed to help adults with severe mental health problems make decisions and take action to manage symptoms and improve their quality of life.

**Objectives** In the present study, the Italian translation of the WSM was implemented and validated. Moreover, the impact of its application in a day hospital setting on cognitive functions, psychopathology, personal resources and real-life functioning with respect to treatment as usual (TAU) was investigated.

**Aims** The study was aimed at assessing the effectiveness of a semi-structured version of WSM in a day hospital setting in patients with severe mental illness.

**Methods** Fourteen patients with a diagnosis of severe mental illness were recruited and randomly assigned to either WSM or TAU. WSM participants attended four 2-hour sessions per week for 1 month, including lessons selected on the basis of the goals of participants. Both groups received weekly planned treatment in the day-hospital setting and continued their pharmacotherapy.

**Results** The two groups of patients were comparable for age, education, cognitive functioning and psychopathological severity.

WSM produced a significantly greater improvement in neurocognition, psychopathology, personal resources and real-life functioning with respect to TAU.

**Conclusions** Our results offer promising preliminary evidence that the use of WSM provides an effective complement to current mental health treatment.

**Disclosure of interest** The authors have not supplied their declaration of competing interest.

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0077

### The impact of premorbid functioning on outcome indices in a large sample of Italian patients with schizophrenia

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**Introduction** An impairment of premorbid adjustment (PA) has been regarded among poor prognostic indicators of schizophrenia. Some discrepancies in the literature suggest the usefulness of further characterizations of its impact on different aspects of the disease.

**Aims** The present study aimed to investigate the association of poor PA with psychopathology, neurocognition and real-life functioning in patients with schizophrenia recruited within the multicenter study of the Italian network for research on psychoses. functioning during childhood and adolescence (early adjustment) was assessed also in a group of healthy controls (HC) and one of unaffected relatives of patients (UR).

**Methods** Group comparisons were performed between patients with poor and those with good PA. Differences in frequency of poor early adjustment were investigated among patients, HC and UR.

**Results** Patients with poor PA, as compared to those with good PA, showed earlier age of onset, more severe negative symptoms and disorganization, greater impairment on all cognitive domains with the exception of attention/vigilance and worse real-life functioning in the considered areas (interpersonal relationships, community activities and work abilities). The pattern of poor early adjustment was more frequent in patients with respect to UR and HC and, to a less degree, in UR with respect to HC.

**Conclusions** Our findings confirm that poor PA in schizophrenia is associated with poorer illness outcome, and offer a further characterization of PA impact on different psychopathological and cognitive domains. They also suggest that poor early adjustment is a candidate endophenotype of schizophrenia, occurring in patients and their unaffected relatives.

**Disclosure of interest** The authors have not supplied their declaration of competing interest.

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0078

### Electrophysiological correlates of negative symptom domains in schizophrenia

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**Introduction** Negative symptoms are a core feature of schizophrenia but their pathophysiology remains elusive. They cluster in a motivation-related domain, including apathy, anhedonia, asociality and in an expression-related domain, including alogia and blunted affect.

**Aim** Our aim was to investigate the different neurobiological underpinnings of the two domains using the brain electrical microstates (MS), which reflect global patterns of functional connectivity with high temporal resolution.

**Method** We recorded multichannel resting EEGs in 142 schizophrenia patients (SCZ) and in 64 healthy controls (HC), recruited to the Italian network for research on psychoses study. Four microstates (MS) classes were computed from resting EEG data using the K-Mean clustering algorithm. Pearson's coefficient was used to investigate correlations of microstates measures with negative symptom domains, assessed by the Brief Negative Symptoms Scale (BNSS).

**Results** SCZ, in comparison to HC, showed increased contribution and duration of MS-C. Only the avolition domain of BNSS correlated with the contribution and occurrence of MS-A. Within the same domain, anticipatory anhedonia, apathy and asociality, but not consummatory anhedonia, were positively correlated with contribution and occurrence of microstate A. Asociality was also negatively correlated with contribution and occurrence of MS-D.

**Conclusion** Our findings support different neurobiological underpinnings of the negative symptom domains, avolition and expressive deficit. Furthermore, our results lend support to the hypothesis that only anticipatory anhedonia is linked to the avolition domain of the negative symptoms. Mixed results in the literature concerning the presence of MS-A and D abnormalities in schizophrenia might be related to the syndrome heterogeneity.

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**0079**

### Anticipating outcome: Predictors of first and subsequent relapses in schizophrenia. A 3-year follow-up

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**Introduction** Relapse prevention during early stages after psychosis onset is a key factor for long term outcome. While factors associated with first relapse have been widely studied, factors associated with subsequent relapses are poorly described.

**Objectives** To determine predictive factors of first and subsequent relapses among patients recruited from a cohort of PAFIP Early Intervention Program.

**Material and methods** We analyzed socio-demographic and clinical data of a cohort of 393 first episode psychosis (FEP) patients that were recruited since February 2001 to May 2011. Of these, 341

achieved clinical remission and were, therefore, considered to be at risk of relapse. They were followed-up for 3 years. A wide range of potential factors were included as possible predictors of relapse. Test univariate, analysis logistics of regression, regression of Cox and analysis of survival of Kaplan-Meier were carried out.

**Results** Poor adherence to medication was the main predictor associated to first relapse (ExpB: 2.979;  $P < 0.001$ ). After the first relapse, only 56 patients (33.9%) underwent a second relapse, being the diagnosis (ExpB: 1.975;  $P = 0.074$ ), the age of onset, (ExpB: 1.078;  $P = 0.003$ ) and a low level of positive symptomatology (ExpB: 0.863;  $P = 0.03$ ) the predictors of associated with a second relapse.

**Conclusions** After a FEP, non-adherence to medication is the main predictor of first relapse. Second and subsequent relapses relate with non-modifiable factors such as age of onset or schizophrenia diagnosis. This subgroup of patients could have greater predisposition to relapse related with the severity of the disease itself.

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**0080**

### Needs of people with schizophrenia/psychosis and their caregivers: A large scale survey

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For the first time in Spain, a large scale survey (5205 people) was carried out to establish the real needs of those directly affected by the illness. Patients and caregivers responded to a 9-question survey concerning dimensions: personal, social, medical treatment, psychotherapy and rehabilitation. For patients, the most important need (an average score of 3.5 on a scale of importance from 1 to 4) was to feel their emotional needs covered. The following average scores were also obtained: feel well physically (3.42), improve autonomy (3.41), have leisure activities (3.21) and work/study (3.1). A total of 42% of patients indicated having little or no freedom over their lives. Thirty-six percent indicated that medical treatment did not start soon enough, 35% that psychotherapy started too late and 13% saying they had received no psychotherapy at all. The help from professionals most valued was provide information about the illness (3.4), dedicating more time (3.4) investigating new treatments (3.3) paying attention to secondary effects (3.3) and incorporating the patient in decision making (3.3). Most patients reported a state of health “regular to good” but 10% indicated not being understood at all in their social environment since onset of illness and 25% being little understood. The anti-stigma initiative most valued was to increase investment in schizophrenia in health planning. Integral health planning should incorporate patient insights concerning basic needs and treatment preferences.

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